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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,090	02/12/2001	Mordechai Daniel	P-181-1 US	9723

7590 02/16/2005
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EXAMINER

NGUYEN, TANH Q

ART UNIT PAPER NUMBER

2182

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/782,090

Applicant(s)

DANIEL ET AL.

Examiner

Tanh Q. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4 and 10-33 is/are pending in the application.
- 4a) Of the above claim(s) 20-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4 and 10-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 22, 2004 has been entered.

Applicant filed a subsequent amendment on September 29, 2004 - as a result of the interview with the examiner on August 11, 2004 and a notice of non-compliant amendment. The amendment filed September 29, 2004 was resubmitted on December 14, 2004 for the claims portion only - to include a listing of all the claims, including withdrawn claims.

Specification

2. The disclosure is objected to because of the following informalities:

the specification discloses [a stopper-type separator (or stopper), which is marked as "FM",...] (page 2 - second amended paragraph to the specification on April 1, 2004). It appears that applicant discloses the stopper being "FM". Such disclosure appears to be in contradiction with the next sentence of the same amended paragraph, which discloses [The "FM" comprises at least the stopper and the "stopper magic

number”] - as “FM” cannot be the stopper, and comprising the stopper and the stopper magic number at the same time.

the specification discloses that the magic number is used to verify correctness of the queue management [0031] or to check for validity [0044] when it is contained in a message separator; the specification further discloses a message stopper containing a predefined magic number without disclosing that predefined the magic number in the message stopper is used to verify correctness of the queue management or to check for validity. The specification needs to be amended to clarify that the predefined magic number in the message stopper is used to verify correctness of the queue management or to check for validity.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 4, 10-19 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for said transmitting CPU to perform a read operation from said receiving CPU, does not reasonably provide enablement for said transmitting CPU to perform a read operation from said receiving CPU by the performance of: a write operation providing a separator to said local memory of said receiving CPU at a location pointed by said write head register, and at least one message to said local memory of said receiving CPU at a location pointed by said write

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head register, requesting data to be read by said transmitting CPU, and a write operation performed by said receiving CPU to said transmitting CPU containing said data to be read by said transmitting CPU.

The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

The specification does not provide enablement for a write operation (performed by the transmitting CPU) providing at least one message ... requesting data to be read by said transmitting CPU, and a write operation performed by said receiving CPU to said transmitting CPU containing said data to be read by said transmitting CPU.

Response to Arguments

5. Applicant's arguments regarding the magic number, see pages 6-7, filed September 29, 2004, with respect to the rejection of claims 18-19 under 35 U.S.C. 112, first paragraph have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, the specification needs to be amended to clarify that the predefined magic number in the message stopper is used to verify correctness of the queue management - as is indicated by applicant on the last 2 lines of page 6.

6. Applicant's arguments and the Declaration under 37 CFR 1.132 filed July 22, 2004 have been fully considered but they are not persuasive. Specifically,

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p.8, line 7: "The content of the read head register 230 [IN RECEIVER 200] is an address pointing to the location from which data is to be read. When receiver 200 reads data received from transmitter 210, it uses the address indicated by read head register 230 to access the data necessary..." merely teaches using the read head register to read a message in message queue 240.

p. 14, line 16: "...the only exchange between the receiver 200 and the transmitter 210... is the update by the receiver to the transmitter..." merely teaches the total read register of the transmitting CPU being updated by the receiving CPU with the total read register of the receiving CPU.

p. 6, line 4: "In the exemplary embodiments described hereinbelow and with reference to the Figures, there is shown an apparatus and method which accomplishes the transmission of a data message from a transmitting CPU to a receiving CPU across a data bus, using a series of write operations and with no read operations being performed across the said data bus." merely teaches read operations not being required for transmitting a data message from the transmitting CPU to the receiving CPU.

The cited passages do not teach the data message being used for requesting data to be read by the transmitting CPU, and a write operation performed by said receiving CPU to said transmitting CPU containing said data to be read by said transmitting CPU. Furthermore, applicant's arguments and the Declaration under 37

CFR 1.132 filed July 22, 2004 are moot in view of the amendment filed September 29, 2004 and the new ground of rejection set forth in paragraphs 2-3 above.

7. Applicant's arguments filed September 29, 2004 have been fully considered but they are not persuasive because

[0022] "...there is shown an apparatus and method which accomplishes the transmission of a data message from a transmitting CPU to a receiving CPU across a data bus, using a series of write operations and with no read operations being performed across the said data bus." merely teaches read operations not being required for transmitting a data message from the transmitting CPU to the receiving CPU.

[0023] "More specifically each CPU can write to any other CPU in the system. The present invention may also be practiced for transfers between CPUS connected by a data bus other than the PCI type used in the exemplary embodiment." merely teaches that each CPU can transfer to any other CPU of the system, and that the bus other than a PCI bus can be used for the transfer.

[0026] It has hitherto been the case that when writing into a cyclical queue from the transmitter to the receiver, the transmitter side required the knowledge that there is space available in the queue to perform such a write. In order to perform such a function, a read request needed to be performed, thereby checking if such space is available. However in systems where the read operation is relatively slow, such as in a PCI bus, an alternative solution is preferable and is disclosed

hereinbelow in accordance with an exemplary embodiment of the present invention." merely teaches a read request being required to check if space is available in the queue of the receiver before writing in the queue.

The cited passages do not teach the data message being used for requesting data to be read by the transmitting CPU, and a write operation performed by said receiving CPU to said transmitting CPU containing said data to be read by said transmitting CPU.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Quang Nguyen whose telephone number is (703) 305-0138, (or (571) 272-4154 after October 12, 2004) and whose e-mail address is tanh.nguyen36@uspto.gov. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin, can be reached on (703) 308-3301 (or (571) 272-2100 after October 12, 2004). The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 for After Final, Official, and Customer Services, or (703) 746-5672 (or (571) 273-4154 after October 12, 2004) for Draft to the Examiner (please label "PROPOSED" or "DRAFT").

Effective May 1, 2003 are new mailing address is:

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Mail Stop ____

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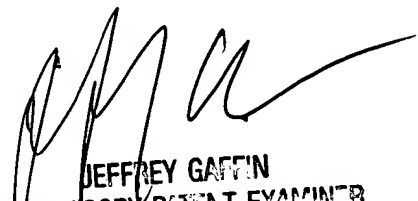
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TQN

February 15, 2005